

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION**

ORDER NO. R5-2005-XXX

NPDES NO. CA0079545

**WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
BIG CREEK POWERHOUSE NO. 1
DOMESTIC WASTEWATER TREATMENT PLANT**

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

BACKGROUND

1. The Southern California Edison Company, a California corporation, owns and operates a wastewater collection, treatment, and disposal system (WWTP or plant) that provides sewerage service to the Big Creek Powerhouse No. 1 and the support community of Big Creek. Southern California Edison Company is hereafter referred to as Discharger.
2. This Order regulates the discharge of treated domestic wastewater to Big Creek, a water of the United States. The discharge is governed by Waste Discharge Requirements (WDRs) Order No. 95-236, adopted by the Regional Board on 27 October 1995. Order No. 95-236 was administratively extended by a letter dated 31 August 2000. The Discharger submitted a Report of Waste Discharge (RWD), dated 6 June 2000, and applied for a permit renewal to continue discharge of pollutants under the National Pollutant Discharge Elimination System (NPDES). Supplemental information to complete filing of the application was submitted on 9 August 2000.
3. The Discharger's effluent consists of tertiary treated domestic wastewater. The discharge is to Big Creek, as shown on Attachment A, a part of this Order. The WWTP consists of primary, secondary, and tertiary units. The tertiary treatment process provides flocculation, filtration and ultraviolet (UV) light disinfection. The Discharger adds alum and soda ash to the secondary treatment units to remove phosphorous, enhance flocculation, and control pH. A concrete-lined overflow pond is adjacent to the WWTP for storage of flow in the event of a plant failure. The chlorination/dechlorination system was replaced with a UV light system. Sludge is digested anaerobically and further processed and disposed of by a contractor that transports it to the Wasco Wastewater Treatment Facility.
4. The RWD describes the tertiary treated discharge as follows:
Design Flow: 0.023 million gallons per day (mgd)
Daily Average Flow: 0.015 mgd
Daily Maximum Flow: 0.0379 mgd

Constituent	Units	Daily Average	Daily Maximum
Temperature (summer)	°C	20	--
Temperature (winter)	°C	10	--
BOD ₅ ¹	mg/L	--	38
BOD ₅ ¹	lbs/day	--	12
TSS	mg/L	1.68	34
TSS	lbs/day	--	10
Ammonia	mg/L	--	0.11

¹ 5-day, 20°C biochemical oxygen demand

5. Monthly self-monitoring data from January 2001 to November 2003 are summarized below.

<u>Constituent</u>	Long-Term ¹ <u>Average</u>	Daily <u>Maximum</u>
Influent		
BOD (mg/L)	171	500
Suspended Solids (mg/L)	114	610
Effluent		
BOD (mg/L)	ND	ND
Suspended Solids (mg/L) ²	8	590
Settleable Solids (ml/L)	ND	ND
Phosphorus (mg/L)	ND	ND
pH (std units)	--	11
Total Coliform (MPN/100mL)	--	900
Ammonia (mg/L)	9.2	20
Conductivity (EC @25°C) ³	44	65

¹ Non-detect values were not used in the calculation of averages.

² Sample collected on 28 November 2001 indicated a concentration of TSS of 590 mg/L due to an operational upset. This was not considered in calculating the average values for TSS since this was the only one sample out of 153 samples evaluated.

³ Conductivity data points collected during the period of June 2003 to November 2003 were used in this analysis.

Based on the monitoring data provided by the Discharger, effluent limitations exceedances occurred on thirteen occasions during this three-year monitoring period. These were: one monthly flow limit violation; two weekly and one monthly total suspended solids limit violations; one daily, three weekly, and one monthly total coliform limit violations; one daily and one monthly settleable solids violations; and one daily and one monthly phosphorous limit violations.

6. Self-Monitoring data for the receiving water stations from March 2001 to July 2003 are summarized below for station R-1 (upstream from the point of discharge) and R-2 (downstream from the point of discharge).

Constituents	R-1			R-2		
	Average	Max	Min	Average	Max	Min
pH (std units)	--	8.6	7.1	--	8.5	7.2
Temperature (°C)	11	18	3	15	24	4
Turbidity (NTU)	0.49	1.1	0.11	0.61	1.3	0.28
Cl ₂ Residual (mg/L)	0.03	0.05	0.02	0.02	0.03	0.01

RECEIVING WATER BENEFICIAL USES

7. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. These WDRs implement the Basin Plan.
8. The discharge to Big Creek occurs at a point SW ¼ of Section 28, T8S, R25E, MDB&M. Treated domestic wastewater is discharged to Big Creek, a water of the United States and a tributary to the San Joaquin River at Discharge Point 001 defined by the point(s), latitude 37° 12' 00" N and longitude 119° 14' 45" W. The site lies within the San Joaquin River Sources to Millerton Lake Hydrologic Area (540.12).
9. The Basin Plan designates the following beneficial uses for the San Joaquin River, Sources to Millerton Lake, which includes Big Creek:
- municipal and domestic supply (MUN);
 - agricultural supply (AGR);
 - hydropower generation (POW);
 - water contact recreation and canoeing and rafting (REC-1);
 - other non-contact water recreation (REC-2);
 - cold freshwater habitat (COLD);
 - warm freshwater habitat (WARM); and
 - wildlife habitat (WILD).

10. The designated beneficial uses of the underlying groundwater, as identified in the Basin Plan, are MUN, industrial service supply, industrial process supply, and AGR.

EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL ANALYSIS

11. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the Federal Clean Water Act (CWA) and amendments thereto that are applicable to the discharge are contained herein.
12. The CWA mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to State or federal law (33 U.S.C. § 1311(b)(1)(C); 40 CFR 122.44(d)(1)). NPDES permits must incorporate discharge limitations necessary to ensure that water quality standards are met. This requirement applies to narrative criteria as well as numerical criteria specifying maximum amounts of particular pollutants. Pursuant to 40 CFR 122.44(d)(1)(i), NPDES permits must contain limitations that control all pollutants that “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality.” 40 CFR 122.44(d)(1)(vi), further provides that “[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limitations.”
13. The Basin Plan contains narrative objectives requiring that: “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life” and “Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.” The Basin Plan requires the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances that adversely affect beneficial uses. As described above, when a reasonable potential exists for exceeding a narrative objective, federal regulations mandate numeric effluent limitations and the Basin Plan establishes a procedure for translating the narrative objectives into numeric effluent limitations.
14. The United States Environmental Protection Agency (USEPA) adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. The State Water Resources Control Board (State Board) adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Plan (SIP)), which contains guidance on implementation of the NTR and the CTR.
15. The Discharger was issued an Order on 27 February 2001, pursuant to California Water Code (CWC) Section 13267, requiring effluent and receiving water monitoring meeting the

requirements of the SIP. These data were required to assist the Regional Board in conducting reasonable potential analyses (RPAs).

16. On 8 January 2004 the Discharger submitted effluent and receiving water data for priority pollutants to the Regional Board for a sample taken on 4 May 2001. On 17 February 2004 the Discharger submitted effluent and receiving water data for priority pollutants for a sample taken on 19 January 2004. The RPA for CTR constituents was based on these effluent and receiving water monitoring data. Based on the RPA methodology in the SIP, no CTR constituent was found to have reasonable potential to cause or contribute to an excursion above water quality objectives or water quality criteria in the receiving water. No effluent limitation is currently required for any CTR constituent.

EFFLUENT LIMITATIONS FOR NON-CTR CONSTITUENTS

17. WDRs Order No. 95-236 established technology-based effluent limitations for BOD, total suspended solids, settleable solids, oil and grease, pH, and total coliform. In order to ensure continued attainment of beneficial uses, this Order carries over these effluent limitations established by the previous Order.
18. Chemical coagulation, flocculation, and filtration remove phosphorus, a nutrient. Excessive quantities of phosphorus in combination with nitrogen, also a nutrient, could cause undesirable algal growth in the receiving waters. According to algal growth potential studies, removal of phosphorus to a concentration at or below 0.5 mg/L deprives algae of an essential nutrient and prevents algal growth. This Order carries over the effluent limitations for total phosphorus of 0.5 mg/L and 0.5 lbs/day for monthly average, and 1.5 mg/L and 0.3 lbs/day for daily maximum from WDRs Order No. 95-236.
19. **Ammonia.** Effluent monitoring data submitted by the Discharger indicates that there may be reasonable potential for discharges from the Big Creek WWTP to cause or contribute to in-stream excursions above applicable water quality standards for ammonia. Due to insufficient data this Order is not establishing water quality-based effluent limitations for ammonia at this time, but instead is requiring additional monitoring to allow a more definitive determination of reasonable potential. If monitoring data indicates that the discharge has reasonable potential to cause or contribute to in-stream excursion above applicable water quality standards, this Order will be reopened to include effluent limitations for ammonia.
20. **Chlorine Residual.** Previous Order No. 95-236 established chlorine residual effluent limitations to regulate the discharge of chlorine from wastewater disinfection processes. The Discharger replaced the chlorine disinfection system with an ultraviolet light disinfection system and no longer stores or uses chlorine at the WWTP. Because chlorine is no longer used at the WWTP the previous Order's chlorine residual limitations are not included in this Order. This discontinuation of chlorine residual effluent limitations is allowed under an exception to federal antibacksliding provisions, codified in 40 CFR 122.44, for facilities where material and substantial alterations or additions have been made which justify the relaxation.
21. **Percent Removal of BOD and TSS.** Previous Order No. 95-236 established 85% removal requirements for BOD and TSS. This Order requires that the WWTP meet 90% removal

requirements for BOD and TSS. Ninety-percent removal requirements for BOD and TSS are technology based requirements for tertiary treatments systems based on best professional judgment (BPJ), and are consistent with requirements established for other tertiary treatment systems.

RECEIVING WATER LIMITATIONS

22. Receiving water limitations in this Order are based on the water quality objectives in the Basin Plan and are established to protect the designated beneficial uses of the receiving waters.
23. State Board Resolution No. 68-16 (hereafter Resolution 68-16) requires the Regional Board in regulating discharge of waste to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (e.g., quality that exceeds water quality objectives). Resolution 68-16 requires that the discharge be regulated to meet best practicable treatment or control to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the people of the State be maintained. The WWTP represents BPTC.
24. Resolution No. 68-16, the Antidegradation Policy, does not allow degradation of water to a quality less than that prescribed in Water Quality Control Plans (Basin Plans). The Basin Plan states that; "The numerical and narrative water quality objectives define the least stringent standards that the Regional Board will apply to regional waters in order to protect the beneficial uses." This Order contains Receiving Water Limitations based on the Basin Plan numerical and narrative water quality objectives for Bacteria, Biostimulatory Substances, Chemical Constituents, Color, Dissolved Oxygen, Floating Material, Oil and Grease, pH, Pesticides, Radioactivity, Salinity, Sediment, Settleable Material, Suspended Material, Tastes and Odors, Temperature, Toxicity and Turbidity.

GROUNDWATER LIMITATIONS

25. The Basin Plan requires the application of the most stringent objective necessary to ensure that groundwaters do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances in concentrations that adversely affect designated beneficial uses. In addition, Resolution 68-16 requires the Regional Board, in regulating discharge of waste, to maintain high quality waters of the State. Due to its extensive treatment and quality, the discharge is not expected to degrade groundwater quality. This permit does not allow the discharge to degrade groundwater.

COLLECTION SYSTEM

26. The Discharger is expected to take all necessary steps to adequately maintain and operate its sanitary sewer collection system.

GENERAL FINDINGS

27. The discharge authorized herein and the treatment and storage facilities associated with the discharge of sewage, except for discharges of residual sludge and solid waste, are exempt from the requirements of Title 27, California Code of Regulations (CCR), section 20005 *et seq.* (hereafter Title 27). The exemption, pursuant to Title 27 CCR section 20090(a), is based on the following:
- a. The waste consists primarily of domestic sewage and treated effluent; the waste discharge requirements are consistent with water quality objectives; and
 - b. The treatment and storage facilities described herein are associated with a sewage treatment plant.
 - c. The impact on existing water quality will be insignificant.
28. CWC Section 13267 states, in part:
- (a) A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region” and “(b) (1) In conducting an investigation specified in [Section 13267] subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.
29. CWC Section 13383 states:
- (a) The state board or a regional board may establish monitoring, inspection, entry, reporting, and recordkeeping requirements, as authorized by Section 13377 or by subdivisions (b) and (c) of this section, for any person who discharges pollutants....
 - (b) The state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.
 - (c) The state board or a regional board may inspect the facilities of any person subject to this section pursuant to the procedure set forth in subdivision (c) of Section 13267.
30. Federal regulations at 40 CFR 122.48 require all NPDES permits to specify:
- ***
- (b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring.
 - (c) Applicable reporting requirements based upon the impact of the regulated activity as specified in §122.44 ...

31. Monitoring and Reporting Program No. XXXX is necessary to determine compliance with this Order.
32. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code §21000, et seq in accordance with Section 13389 of the California Water Code.
33. The Discharger is not required to obtain coverage under a NPDES general industrial storm water permit because all runoff is contained onsite. The Discharger has submitted a letter of non-applicability.
34. The USEPA and the Regional Board have classified this discharge as a minor discharge.
35. The Discharger and interested agencies and persons were notified of the intent to prescribe waste discharge requirements for this discharge and provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
36. In a public meeting, all comments pertaining to the discharge were heard and considered.
37. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided USEPA has no objections.
38. All the above and the supplemental information and details in the attached Information Sheet and Attachments A and B, which are incorporated herein, were considered in establishing the conditions of discharge of this Order.

IT IS HEREBY ORDERED, pursuant to sections 13263, 13267, 13383, and 13376 of the CWC, that Order No. 95-236 is rescinded and Southern California Edison Company, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (National Pollutant Discharge Elimination System)" dated February 2004.

A. Discharge Prohibitions:

1. Discharge of wastes or pollutants at a location or in a manner different from that described in the Findings is prohibited.
2. The by-pass or overflow of wastes is prohibited, except as allowed by Standard Provision A.13. [See attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)"].

3. Wastes and other residual solids removed from liquid wastes or used to treat liquid wastes, except as approved by the Executive Officer, shall be recycled or disposed of in a manner that is consistent with Division 3, Title 27; Chapter 15, Division 3, Title 23; and Division 4.5, Title 22 of the CCR and approved by the Executive Officer.

B. Effluent Limitations:

1. Effluent discharged from Discharge Point 001 shall not exceed the following limitations:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Monthly Median</u>	<u>Daily Maximum</u>
BOD ₅ ¹	mg/L	10 ²	15 ²	---	30 ²
	lb/day ³	1.9	2.9	---	5.8
Total Suspended Solids	mg/L	10 ²	15 ²	---	30 ²
	lb/day ³	1.9	2.9		5.8
Total Coliform Organisms	MPN/100mL	---	---	2.2	23
Settleable Solids	mL/L	0.1	---	---	0.2
Total Phosphorous	mg/L	0.5	---	---	1.5
	lb/day ³	0.1	---	---	0.3

¹ 5-day, 20°C biochemical oxygen demand (BOD)

² To be ascertained by a 24-hour composite

³ Based upon a design treatment capacity of 0.023 mgd.

2. The arithmetic mean of 20°C BOD (5-day) and total suspended solids in effluent samples collected over a monthly period shall not exceed 10 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (90 percent removal).
3. The discharge shall not have a pH less than 6.0 nor greater than 9.0.
4. The monthly average discharge flow shall not exceed 0.023 million gallons per day.
5. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay	-----	70%
Median for any three or more consecutive bioassays	----	90%

C. Sludge Disposal:

Sludge in this document means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the WWTF. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and

State regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.

1. Sludge and solid waste shall be removed from screens, sumps, ponds, clarifiers, etc. as needed to ensure optimal plant operation.
2. Treatment and storage of sludge generated by the WWTF shall be confined to the WWTF property and conducted in a manner that precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.
3. Any storage of residual sludge, solid waste, and biosolids on property of the WWTF shall be temporary and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate Groundwater Limitations.
4. Residual sludge, biosolids, and solid waste shall be disposed of in a manner approved by the Executive Officer (EO) and consistent with Title 27. Removal for further treatment, disposal, or reuse at sites (i.e., landfill, WWTF, composting sites, soil amendment sites) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification
5. Use of biosolids as a soil amendment shall comply with valid waste discharge requirements issued by a regional water quality control board. In most cases, this will mean General Biosolids Order (State Board Water Quality Order No. 2004-12-DWQ, General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities). For a biosolids use project to be covered by the General Biosolids Order, the City must file a complete Notice of Intent and receive a Notice of Applicability for each project.
6. Use and disposal of biosolids shall comply with the self-implementing federal regulations of Title 40, Code of Federal Regulations, Part 503, which are subject to enforcement by the USEPA, not the Regional Board. If during the life of this Order the State accepts primacy for implementation of 40 CFR 503, the Regional Board may also initiate enforcement where appropriate.

D. Receiving Water Limitations

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit. The discharge shall not cause the following in the receiving water:

1. Bacteria: The fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.
2. Dissolved Oxygen: Concentrations of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent

of saturation in the main water mass, or the 95th percentile concentration to fall below 75 percent of saturation.

3. Oil and Grease: Oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the water surface or on objects in the water, or otherwise adversely affect beneficial uses.
4. Color: Discoloration that causes nuisance or adversely affects beneficial uses.
5. pH: The ambient pH to be depressed below 6.5, nor raised above 8.5, nor changes in normal ambient pH levels to be exceeded by more than 0.5 units.
6. Temperature: The natural receiving water temperature to increase more than 5°F.
7. Settleable Material: Substances in concentrations that result in the deposition of material that causes nuisance or adversely affects beneficial uses.
8. Radioactivity: Radionuclides to be present in concentrations that are harmful to human, plant, animal or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.
9. Concentrations of radionuclides in excess of the maximum contaminant levels (MCLs) specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22 of the California Code of Regulations.
10. Toxicity: Toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.
11. Biostimulatory Substances: Biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
12. Floating Material: Floating material in amounts that cause nuisance or adversely affect beneficial uses.
13. Sediment: Suspended sediment load and suspended sediment discharge rate altered in such a manner to cause nuisance or adversely affect beneficial uses.
14. Suspended Material: Suspended material concentrations that cause nuisance or adversely affect beneficial uses.
15. Taste and Order: Taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other

edible products of aquatic origin or to domestic or municipal water supplies.

16. Turbidity: Changes in turbidity that cause nuisance or adversely affect beneficial uses. Turbidity attributable to controllable water quality factors to exceed the following:
 - a. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
 - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
 - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
 - d. More than 10 percent where natural turbidity is greater than 100 NTUs.
17. Pesticides:
 - a. Pesticides in individual or combined concentrations that adversely affect beneficial uses.
 - b. Pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses.
 - c. Total identifiable persistent chlorinated hydrocarbon pesticides in concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer.
 - d. Concentrations exceeding those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 CFR Section 131.12.)
 - e. Concentrations exceeding the lowest levels technically and economically achievable.
 - f. Concentrations exceeding the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15.
 - g. Concentrations of thiobencarb in excess of 1.0 mg/L

E. Groundwater Limitations

The discharge shall not cause the underlying groundwater to contain waste constituents in concentrations exceeding natural background quality.

F. Provisions:

1. The Discharger shall comply with Monitoring and Reporting Program No. R5-2005-XXXX, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.

When requested by USEPA, the Discharger shall complete and submit Discharge Monitoring Reports to USEPA. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self Monitoring Reports.
2. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)", dated February 2004, which are part of this Order.
3. The Discharger shall conduct the chronic toxicity testing specified in the Monitoring and Reporting Program. If the testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a work plan to conduct a Toxicity Reduction Evaluation (TRE) and, after Regional Board evaluation, conduct the TRE. This Order will be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened and a limitation based on that objective included.
4. The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.
5. The Discharger shall implement best practicable treatment and control, including proper operation and maintenance, to comply with this Order.
6. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the state emergency response commission within 15 days of reporting the data to the commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
7. The plant shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency
8. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code, Sections 6735, 7835, and 7835.1. To demonstrate compliance with Title 16, CCR, Sections 415 and 3065, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must

bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

9. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

10. The Board may modify or reopen this Order prior to its expiration date in any of the following circumstances:
 - (a) If present or future investigations demonstrate that the discharge governed by this Order has a reasonable potential to cause or contribute to adverse impacts on water quality and/or beneficial uses of the receiving waters;
 - (b) New or revised water quality objectives (WQOs) come into effect for the receiving water. In such cases, effluent limitations in this permit will be modified as necessary to reflect updated WQOs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs or as otherwise permitted under federal regulations governing NPDES permit modifications;
 - (c) If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified the Discharger may request permit modification on this basis. The Discharger shall include in any such request an antidegradation and anti-backsliding analysis.
11. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Instances of noncompliance shall be reported in accordance with Standard Provisions, B.1. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in modification or revocation of this Order.
12. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of, or clearance from the State Water Resources Control Board (Division of Water Rights).

WDR ORDER NO. R5-2005-XXX
SOUTHERN CALIFORNIA EDISON COMPANY
NPDES NO. CA0079545
BIG CREEK POWERHOUSE NO. 1, DOMESTIC WWTP
FRESNO COUNTY

-15-

13. This Order expires on **19 October 2010** and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than 180 days in advance of such date to apply for renewal of waste discharge requirements if it wishes to continue the discharge.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

THOMAS R. PINKOS, Executive Officer

(Date)